

## OFFICE OF THE LIEUTENANT GOVERNOR

### SHEILA SIMON – LIEUTENANT GOVERNOR

# Illinois River Coordinating Council Quarterly Meeting

May 8, 2013
Illinois Audubon Society
Springfield, Illinois
1:30 PM

### Minutes

## **Call to Order and Attendance**

Capoccia called the Illinois River Coordinating Council (IRCC) meeting to order and welcomed members and guests.

Capoccia informed the Council that Lt. Governor Simon sent her apologies for not being able to attend the meeting and thanked members of the IRCC for their continued service.

Capoccia reminded the Council that a pending Executive Order from Governor Pat Quinn will combine the three Rivers Coordinating Councils into an overarching Joint Rivers Coordinating Council. This change should occur on May 29, 2013.

Capoccia invited members of the IRCC to introduce themselves.

## Citizen Members

Doug Blodgett, The Nature Conservancy of Illinois; Ray Paine, the Illinois Farm Bureau; and Richard Worthen.

## State Agency Members

Bill Milner, the Illinois Department of Natural Resources; and Terry Weldin-Frisch, the Illinois Department of Commerce and Economic Opportunity.

## **Ex-Officio Members**

Ivan Dozier, the US Department of Agriculture, Natural Resources Conservation Service; Gary Johnson and Doug Yeskis, the US Geological Survey; and Steve Rumple, the US Army Corps of Engineers, Rock Island District.

### **Absent Members**

Brian Anderson, the Illinois Natural History Survey; US Fish and Wildlife Service, Illinois River; Nani Bhowmik, the Illinois State Water Survey; Tom Brooks, the Illinois Department of Transportation; Association of Illinois Soil and Water Conservation Districts; Colleen Callahan, the US Department of Agriculture, Rural Development; Louise Clemency, the US Fish and Wildlife Service, Chicago Office; Misagnaw Demissie, the Illinois State Water Survey; Margaret Frisbie, Friends of the Chicago River; US Department of Agriculture, Farm Service Agency; Reggie Greenwood, the South Suburban Mayors and

Managers Association; Illinois Department of Agriculture; US Army Corps of Engineers, St. Louis District; US Environmental Protection Agency, Region 5; US Coast Guard, Sector Upper Mississippi; the National Great Rivers Research and Education Center; Manohar Kulkarni, the Illinois Sustainable Technology Center; Don McKay, the Illinois Geological Survey; Daphne Mitchell; US Army Corps of Engineers, Chicago District; US Coast Guard, Sector Lake Michigan, Marine Safety Unit Chicago; and the Illinois Environmental Protection Agency.

## **Approval of Minutes**

Capoccia noted because quorum was not met at this meeting, the Council would not be able to approve minutes from the previous Joint Rivers Coordinating Council meeting on February 27, 2013, in Springfield, Illinois.

## Welcome and Introductions - Tom Clay, Director, Illinois Audubon Society

Clay thanked the Council for allowing the Illinois Audubon Society to host its meeting at the Margery Adams Wildlife Sanctuary and invited the Council to return to the facility.

The Margery Adams Wildlife Sanctuary is a 40-acre plot of land. The house was originally built in 1857, and was purchased by L. B. Adams in 1869. Margery Adams, a fourth-generation resident of the home who was born in 1897, donated the home to the Illinois Audubon Society in 1983. The Illinois Audubon Society decided to move its headquarters from Danville, Illinois to the Margery Adams Wildlife Sanctuary within the past 10 years. The acreage within the Margery Adams Wildlife Sanctuary was originally a tall grass prairie over 300 years ago, and was utilized as an orchard during the Adams' ownership of the land. The Illinois Audubon Society is working to return the sanctuary to a more natural, native Illinois habitat.

The Illinois Audubon Society is Illinois' oldest non-profit conservation association, and it is also older than the National Audubon Society. The Illinois Audubon Society is an independent state Audubon society with chapters throughout the State of Illinois. The Illinois Audubon Society primarily operates as a land-trust by purchasing land for restoration. Currently, the Society is working to acquire Hill Prairie in Pike County and a small tract of land in Lake County.

Clay again thanked the Council for utilizing the services of the Margery Adams Wildlife Sanctuary and the Illinois Audubon Society.

Capoccia introduced Steve Rumple, United States Army Corps of Engineers (USACE), Rock Island District, to discuss the status of the Illinois River Basin Restoration Program.

# <u>Illinois River Basin Restoration Program 519 Program Update – Steve Rumple, U.S. Army Corps of</u> Engineers, Rock Island District

Illinois River Basin Restoration Program – 519 Program Update

The Illinois River Basin Restoration Program was authorized by Section 519 of the Water Resources Development Act of 2000 (WRDA 2000) for the purpose of restoring, preserving, and protecting the Illinois River Basin. The WRDA 2000 authorized the USACE to develop a comprehensive plan and to construct critical restoration projects along the Illinois River. The overall goal of Section 519 was to restore and maintain the ecological integrity of the Illinois River Basin by reducing sediment delivery; restoring side channels and backwaters; restoring floodplain, riparian, and aquatic habitat and function; increasing fish passage; naturalizing hydrology and water levels; and improving water sediment and quality.

Illinois River Basin Restoration Comprehensive Plan was completed in 2007 and provided to Congress in 2008. The report was approved by the Assistant Secretary of the Army (Civil Works), who recommended the USACE proceed with Critical Restoration Projects under existing WRDA 2000 authority. Work on 16 of the Critical Restoration Projects began in 2002, with the goal of improving critical habitat and processes for aquatic organisms. Federal investments totaling \$131 million were provided for the program, and a cost-share agreement was developed with the Illinois Department of Natural Resources (IDNR) which currently shares 35% of the costs.

The Critical Restoration Projects are advancing in planning and construction. Feasibility planning is now complete on four of the 519 Projects, and planning for another four 519 Projects will begin in 2013. The planning budget for 2013 is \$920,000. Feasibility studies will be conducted for Starved Rock Pool Backwater (2013), Alton Pool Side Channel (2013), Senachwine Creek (2014), and Kankakee River (2014). Construction of one of the Critical Restoration Projects, a \$1.3 million project for the Waubonsie Creek Fish Passage, was completed in 2010. Construction also began this year on a \$9.1 million project to create the Peoria Upper Island. Two other projects, Pekin Lake North Backwater and Pekin Lake South Backwater, are awaiting construction funds.

In the future, the USACE hopes to maintain a strong partnership with the IDNR while also adding the sponsorship of the Indiana Department of Natural Resources. The USACE also hopes to continue close internal and external coordination of the 519 Programs, the Environmental Management Program, and the Navigation and Ecosystem Sustainability Program. The 519 program should soon move to full program capability, during which the USACE may plan four projects and construct two projects per year. Four of the 519 Critical Restoration Projects will be ready for design and construction in 2013.

The full handout for this update can be found here.

The Illinois River Basin Restoration Program – 519 Program Work Plan and Critical Restoration Project Updates

Overall funding for the Fiscal Year 13 519 Program Work Plan totals \$920,000.

The Fiscal Year 13 519 Program Work Plan will include the following individual funding allocations:

- 1. Illinois River Basin Program Management \$75,000
- 2. Starved Rock Pool Backwaters \$350,000

- 3. Senachwine Creek Mainstem \$250,000
- 4. Kankakee River \$100,000
- 5. Alton Pool Side Channels \$25,000
- 6. Future Critical Restoration Project Identification \$75,000
- 7. Sediment Gages \$45,000

Full information on these updates can be found here.

## Questions for Rumple

Worthen asked if USACE has completed a survey of the damage the 2013 flooding has done to previously accomplished work on these projects. Rumple responded he was unaware if a survey of this type had been done, but noted another branch of the USACE is currently coordinating a joint command to look at flooding impacts. Rumple noted in many project areas, water levels have been too high to continue work on 519 projects. Worthen voiced his concern that projects might be impacted by the flooding, therefore undermining previous work. Rumple responded that he would research the issue and provide an answer to the Council.

Blodgett asked what features are being considered for the Starved Rock project. Rumple responded backwater restoration typically refers to a dredging project, but will research the issue and provide an answer to the Council.

Capoccia introduced Gary Johnson, United States Geological Survey (USGS), to discuss the role of the USGS in studying the 2013 flooding along the Illinois River.

# <u>2013 Illinois River Flood and Record Floods, Summary of USGS Activities – Gary Johnson, U.S. Geological Survey</u>

A major responsibility of the USGS is to provide streamflow data. For this reason, the USGS kept in close contact with other state and federal agencies, including the IDNR and the USACE, during the 2013 flooding events and post-flooding events. One of the roles of the USGS is to help provide data on the impact of the 2013 floods in comparison to other years.

Around 240 streamgages are operated by the USGS in and around the State of Illinois. Many of the gages are newer gages which were placed under 30 years ago. However, the USGS can use many gages which have been in place over 30 years to monitor and compare changes and trends in streamflow and rainfall patterns throughout the history of Illinois.

In total, the USGS operates over 8,000 continuous record streamgages throughout the country. Each streamgage is equipped with a sensor which monitors the height of the water in stages. That data is transmitted to the USGS via satellites equipped on the streamgages, which provides real-time data. Field staff are continually deployed to check the accuracy of the streamgage data and complete maintenance on the streamgage, particularly during times of flood or drought.

A comparison of the 2013 flooding events to historical flooding events in Illinois shows the flooding events were significant for many areas of the state. In particular, the USGS selected data from four

stages to provide at the current Council meeting to demonstrate the significance of the flooding event. Data on the streamflows at each of these gages showed that the 2013 flooding event replaced the previous historical peak flooding event for these locations.

Type of data...

Data from most recent event (April 2013) at St Joseph Creek at Route 34, Lisle, IL

Previous peak: July 18, 1996, gage height 12.89 feet

Peak of this event: April 18, 2013, gage height just over 14 feet. Verified by USGS employee.

Desplaines River near Des Plaines

Previous peak on Oct 1, 1986, gage height 10.88 ft.

Peak of this event just under 11 on April 19

Illinois River at Henry, IL

Previous peak on March 7, 1985 of 32.02 ft

New peak just under 33

Kingston Mines, IL

Previous peak on May 25, 1943 of 26.02 ft

New peak just above 26 ft

Monday, April 8, full map of country show conditions low streamflow

April 10-11, larger system comes through, 2-4 inch rain events, very limited flooding.

High streamflow & saturated soils through few days.

Friday April 19, rains begin again – some areas 7-8 inches of rain

High streamflows travel from north downstream IL river, moving peaks south

Provisional observations:

Nineteen new peaks-of-record.

11 sites with longer periods of record (others were relatively new gage)

Eighteen sites with AEP (annual exceedance probability) of < 1%. 1 percent chance or less of this happening every year – colloquially called "100 year flood" So, 18 sites experienced a "100 year flood"

Forecast process:

USGS collects and provides streamgage data

NWS uses the USGS streamgage data, coupled with rainfall predictions, to issue forecasts

USACE and other entities use forecasts to make operational decisions

Advanced Hydrologic prediction service

Predicting a peak of IL river on April 27, 2013

Was originally forecasted for earlier peak, but small levee blew on IL river creating a dip in the increase

Backflow event in City of Chicago

CoC almost always flows downstream into Des Plaines and then into IL River

During times of extreme flood,

Gages on Chicago area waterway system from Chicago Lock at Lake Michigan, down Chicago River, to Chicago Sanitarium Ship Canal, to Lockport Lock and Dam

During times of extreme storm events, USACE opens Lockport Lock and Dam to dewater the cause so rainfall does not cause flooding in Chicago. Rare events, when too much water and opening lock won't work, the USACE needs to open Chicago Lock at lake to get rid of water to the lake.

### Questions for Johnson

Worthen asked if opening the Chicago Lock transported any carp into the lake. Yeskis believed there should not be any carp north of the electric barrier, which is south of the Lockport Lock, so it should not have introduced any carp into the lake.

Blodgett asked how many gages are in IL

newer gages – to make them more liked.

Johnson responded 241 gages in and around Illinois, including border areas along Mississippi, Wabash, and Ohio – a few are operated by Missouri/Indiana

Worthen – are any areas poorly covered/short streamgages

Johnson responded Gages exist where there are people/money to pay for them, so there are rural southern areas without population or interest to implement stream gage. Support from IDNR helps to fund gages in rural areas.

Worthen how many additional gages would IDNR or USGS put up if possible? Johnson there have been network evaluations done in past to answer question of where gages are needed to help better define regional equations. Try to have gages placed on different size variations, geographical locations, population types (urban/rural) to provide better regional equations. Small rural streams are very underrepresented, but funding not often available. Yeskis noted that with increased urbanization, need for gages is increased – more "flashy" response to rainfall than would be seen in rural or agricultural areas. Trying to work with local partners for funding – many streamgages are funded by federal, state and local agencies. Trying to provide additional benefits from gages – ie., flood inundation equipment and many of the

Worthen noted last job was local stormwater manager for Madison County. Gaging of streams/runoff was extremely important for that area, which suffered from runoff from bluffs. Gages provide crucial information for local citizenry. Stormwater needs to be dealt with on local level. Knowing rainfall is extremely important to this process.

Johnson noted the best decision makers are those with available information to make their decisions – streamflow information is one major piece of this puzzle.

Capoccia introduced Marc Ayers, Office of the Lt. Governor, to discuss the planning process for It's Our Rivers Day.

## It's Our Rivers Day Planning - Marc Ayers, Office of the Lt. Governor

September 21, third Saturday in September, is the day but will also be celebrated the entire week. Looking for hosts to host events – education, conservation, and recreation are the themes.

Website will be created within next few weeks, linked to LG's website, which shares information on events and hosts so the public has access to information.

Working with Daphne, USFWS, Alton Main Street, to find events and hosts.

Invited members to contact with information of events, entities or organizations that might want to host, etc.

Capoccia opened the meeting for members of the Council to make comments.

#### **Member Comments**

Worthen – Daphne wanted to ask about mining/fracturing moratorium Ayers LaSalle County has moratorium on permits, currently. Current litigation for MS Sands, no updates on that process. Can reach out to Tracy for update on process of litigation.

Worthen noted issue of hydraulic fracturing is not issue of economics, but a water resources issue. Argued hydraulic fracturing permanently pollutes and destroys water resources. Understand fracturing potentials are currently in Southern IL where water resources cannot support the industry. Wants to know where the water resources will be taken from. Not enough groundwater or surface resources below interstate 70 to support the industry. Believes it would be a disaster for fracturing to be approved in Southern Illinois because of potential impact on water.

Worthen noted belief that hydraulic fracturing produces earthquakes.

What type of disaster would occur if this impacted the New Madrid Fault? Capoccia thanked for comments.

Blodgett noted scientists argue we can expect increase in both frequency and magnitude of flooding. If one looked at 100 years of data on IL River, almost 70% of flooding has occurred over past 100 years. Some may be contributable to climate changes, others to impervious surfaces and stormwater management. Believes part of solution to this is not only continuing to fight floods with levees and sandbags, but also creation of systemic, coordinated flood management policy/plan. We have plans for disaster mitigation after it has occurred, but we do not manage the water that is going down river. Argued the locks and dams we currently have are not designed for major flooding events. Historically, waters moved to flood plain which spread waters. Now, majority of floodplains are behind levees. Most levees have high, expensive development behind them – example, Komatsu dressers and Caterpiller in Peoria both behind seawalls. Coordinated, systemic, proactive approach to managing, rather than fighting floods, would be better.

Spunky Bottoms at Little Creek Levee/Drainage District. 16,000 acres inside that drainage district. Huge flood in that district. On Thursday (two weeks ago tomorrow), the levee failed and broke. Had been overtopped for almost two days in places, but river blew out section of levee, filled within 6-8 hours. River dropped not only in that area, but also in levees upstream. Flood at that site was probably headed up higher until the breach happened. If breach had occurred at correct time, it could have taken even more of crest off – similar to Birds Point/New Madrid Floodway. Argued high time for coordinated effort between state and federal agencies to manage floodplains during these events to mitigate effects. TNC interested in this, similar groups have also submitted proposals. Wonderful tools to forecast and adapt to these events, but nothing to proactively abate them.

Believes it would be a lot cheaper for taxpayers to allow certain areas of floodplain to flood and mitigate that damage than to allow flooding to occur in other larger areas (like Peoria)

Worthen noted 1993 flood was parallel to this event. Poised to break over the St. Louis Levee, until Harrisonville Levee blew out. Had this not occurred, it would have burst St. Louis Levee and caused significant damage to the city. Similar to event this year, the river dropped almost immediately.

Blodgett noted prior to next meeting TNC would like to draft resolution and circulate to IRCC members in support of integrated management plan for IL River flooding which could be voted on at next meeting.

Ayers: September 18 will be next meeting, will be JRCC meeting since the Councils will now be combined.

Johnson: Did the IL Integrated Management Plan address similar issues? Blodgett noted it talked about flooding issues, but did not believe that an integrated, comprehensive approach had been made. Comp study done by USACE in St. Louis began looking at this, provided alternative idea in which drainage and levee districts could store this water. Growing support for this. Should use good science to determine benefits and costs of this plan.

Capoccia noted we should look at IMP and discuss with SAC to see if the plan has attempted to address this at all.

Yeskis noted evaluation was done for IMP – Marshall Plumley, Nani, Daphne – never been study on effects of changes along river (and the IMP) on the river. Have been some actions trying to mitigate, but no studies have been done to determine if they have helped.

Capoccia opened the meeting for members of the public to make comments.

## **Public Comments**

There were no public comments.

## Adjournment

Capoccia informed the Council that the next meeting would be a Joint Rivers Coordinating Council meeting held on September 18, 2013 at the Midewin National Tallgrass Prairie in Wilmington, Illinois. This meeting will coincide with It's Our Rivers Day.

Capoccia invited a motion to adjourn the meeting.

A motion was made by Blodgett and was seconded by Weldin-Frisch.

There was no opposition to the motion.

The meeting was adjourned.